

Injury Prevention for: The Hamstring

What are the Hamstrings?

- A group of muscles that run from your lower back to the back of your lower leg.
- Hamstrings allow your hip to extend and your knee to flex.
- Hamstring pulls are common in sports that require sudden acceleration such as a sprint. They can also be caused by a direct blow to the muscle.

What is a pulled Hamstring?

- A tear in the muscle fiber.
- Muscle strains and tears occur when the muscle is trying to contract while another force (ground, another player, etc.) forces the muscle in the opposite direction. When this force is strong enough it causes the muscle fibers to tear.
- In severe cases the muscle will completely tear off.

Symptoms of a pulled Hamstring:

- Usually sudden and painful, often occurs when running, lunging or jumping. They will report to have heard a pop.
- Bruising: small tears can cause the muscle to bleed.
- Swelling in the back of the thigh.
- Spasm: Muscle spasm is common and painful symptom of a hamstring injury. This occurs because of the trauma to the muscle. The trauma causes confusion with the muscles' signals to contract thus causing hamstring stimulation when not needed.
- Difficulty contracting: Flexing the knee is painful and can often prevent the person from being able to walk normal.
- If unable to contract, the hamstring muscle may be completely ruptured.

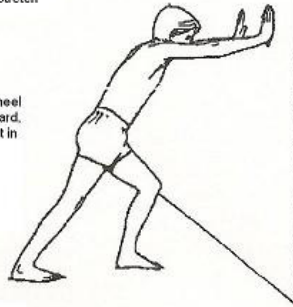
Treatment/Prevention:

- There is no foolproof way to avoid a hamstring injury, however there are ways to decrease your risk.
- Proper warm up and cool down.
- Muscle balance between you hamstrings and quads.
- Regular stretching program.
- Proper fluid and diet intake, dehydration can cause muscle cramping, therefore increasing the chance of a muscle injury.

Hip and Knee 41
Stretching: Gastroc Stretch

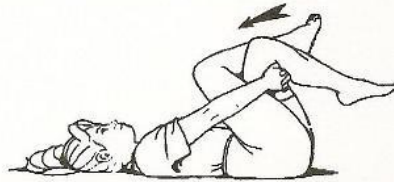
Keeping back leg straight, with heel on floor and turned slightly outward, lean into wall until a stretch is felt in calf.

Hold 5 seconds.
Repeat 10-15 times.
Do 3-4 times a day.



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Hip and Knee-48 Supine Piriformis Stretch

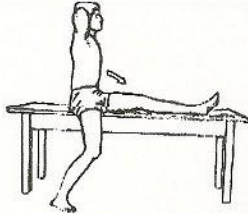


Cross legs with involved leg on top. Gently pull opposite knee toward chest until a comfortable stretch is felt in the buttock/hip area.

Hold 5 seconds.
Repeat 10-15 times.
Do 3-4 times a day.

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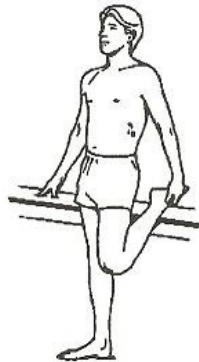
Hip and Knee-40A Stretching: Seated Hamstring Stretch



Sitting at the edge of a table with involved leg on the table, or sitting in a chair with the involved leg extended across to another chair. Lean trunk forward toward thigh. Keep chest up.

Hold 5 seconds. Repeat 10-15 times.
Do 3-4 times a day.

Hip and Knee Stretching
Quadriceps Stretching



Pull heel toward buttock until stretch is felt in front of thigh.

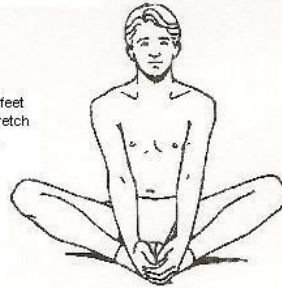
Hold 5 seconds.
Repeat 10-15 times.
Do 3-4 times a day.

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Hip and Knee 32-Stretching
Inner Thigh/Gorin Stretch

Place heels together and pull feet together toward gorin until stretch is felt in gorin and inner thigh.

Hold 5 seconds
Repeat 10-15 times
3-4 times a day.

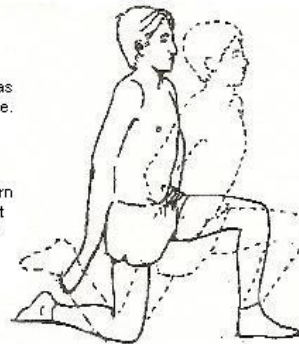


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Quad, Iliopsoas Stretch 34-A
Forward Lean in half-kneeling

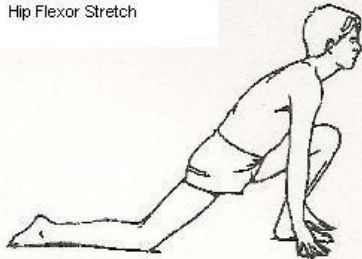
Tighten stomach muscles as you lean out over bent knee.

Hold 5 seconds, then return to starting position. Repeat 10-15 times. Do 3-4 times per day.



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Hip and Knee-34 Stretching
Hip Flexor Stretch



Slowly push pelvis downward while slightly arching back until a stretch is felt on front of hip.

Hold for 5 seconds and repeat 10-15 times 3-4 times a day.

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